

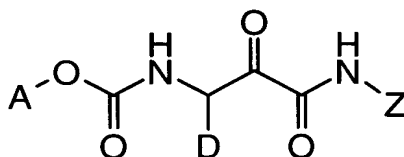
**Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**In the Claims:**

What is claimed is:

Claim 1 (Original): A compound of Formula (I):



(I)

or a salt, solvate, or physiologically functional derivative thereof:  
wherein

A is the group defined by  $(Q^3)-(Q^2)_n-(Q^1)-(Q)_m-$ , wherein  
Q is  $\text{CH}_2$  and m is 0, 1, or 2

$Q^1$  is  $\text{C}_3$ - $\text{C}_7$  cycloalkylene;

$Q^2$  is  $\text{C}_1$ - $\text{C}_3$  alkylene and n is 0 or 1, or

$Q^2$  is OR, where R is  $\text{C}_1$ - $\text{C}_3$  alkylene and n is 1,

$Q^2$  is SR, where R is  $\text{C}_1$ - $\text{C}_3$  alkylene and n is 1; or

$Q^2$  is  $\text{N}(\text{R}')\text{R}$ , where  $\text{R}'$  is hydrogen or  $\text{C}_1$ - $\text{C}_6$  alkyl, R is  $\text{C}_1$ - $\text{C}_3$  alkylene and n is 1; and

$Q^3$  is aryl, heteroaryl, or aryl or heteroaryl substituted with at least one independently selected  $\text{R}^1$  group;

D is  $\text{C}_1$ - $\text{C}_6$  alkyl or  $\text{C}_1$ - $\text{C}_6$  alkyl substituted with  $-\text{NR}^2\text{R}^3$ ;

Z is the group defined by  $-(X)_p-(X^1)_q-(X^2)$ , wherein

X is  $C(R')(R'')$ , wherein R' is hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl, R'' is hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl, and p is 0, 1, or 2,

X<sup>1</sup> is C(O)OCH<sub>2</sub>, wherein q is 0 or 1, and

X<sup>2</sup> is aryl, heteroaryl, or heterocyclyl;

R<sup>1</sup> is halo, C<sub>1</sub>-C<sub>6</sub> alkyl, aryl, heterocyclyl, or C<sub>1</sub>-C<sub>6</sub> haloalkyl;

R<sup>2</sup> is hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl;

R<sup>3</sup> is hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, -C(O)R<sup>4</sup>, or -S(O)<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>;

R<sup>4</sup> is heterocyclyl, -NR<sup>5</sup>R<sup>6</sup>, and

R<sup>5</sup> and R<sup>6</sup> are independently selected from hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl.

Claims 2-4 (Cancelled):

Claim 5 (Original): A compound as claimed in claim 1, wherein Q is CH<sub>2</sub> and m is 0, 1, or 2.

Claim 6 (Original): A compound as claimed in claim 1, wherein Q is CH<sub>2</sub> and m is 0 or 1.

Claim 7 (Original): A compound as claimed in claim 1, wherein Q is CH<sub>2</sub> and m is 1.

Claim 8 (Original): A compound as claimed in claim 1, wherein Q<sup>1</sup> is C<sub>3</sub>-C<sub>7</sub> cycloalkylene.

Claim 9 (Original): A compound as claimed in claim 1, wherein Q<sup>1</sup> is selected from the group cyclobutylene, cyclopentylene or cyclohexylene,

Claim 10 (Original): A compound as claimed in claim 1, wherein Q<sup>1</sup> is cyclobutylene.

Claim 11 (Original): A compound as claimed in claim 1, wherein  $Q^2$  is  $C_1-C_3$  alkylene and  $n$  is 0 or 1.

Claim 12 (Original): A compound as claimed in claim 1, wherein  $Q^2$  is  $C_1-C_3$  alkylene and  $n$  is 1.

Claim 13 (Original): A compound as claimed in claim 1, wherein  $Q^2$  is OR, wherein R is  $C_1-C_3$  alkylene and  $n$  is 1.

Claim 14 (Original): A compound as claimed in claim 1, wherein  $Q^2$  is SR, wherein R is  $C_1-C_3$  alkylene and  $n$  is 1.

Claim 15 (Original): A compound as claimed in claim 1, wherein  $Q^3$  is aryl or aryl substituted with at least one independently selected  $R^1$  group.

Claim 16 (Original): A compound as claimed in claim 1, wherein  $Q^3$  is phenyl or phenyl substituted with at least one independently selected  $R^1$  group wherein  $R^1$  is halo or  $C_1-C_6$  alkyl.

Claim 17 (Original): A compound as claimed in claim 16, wherein  $R^1$  is halo.

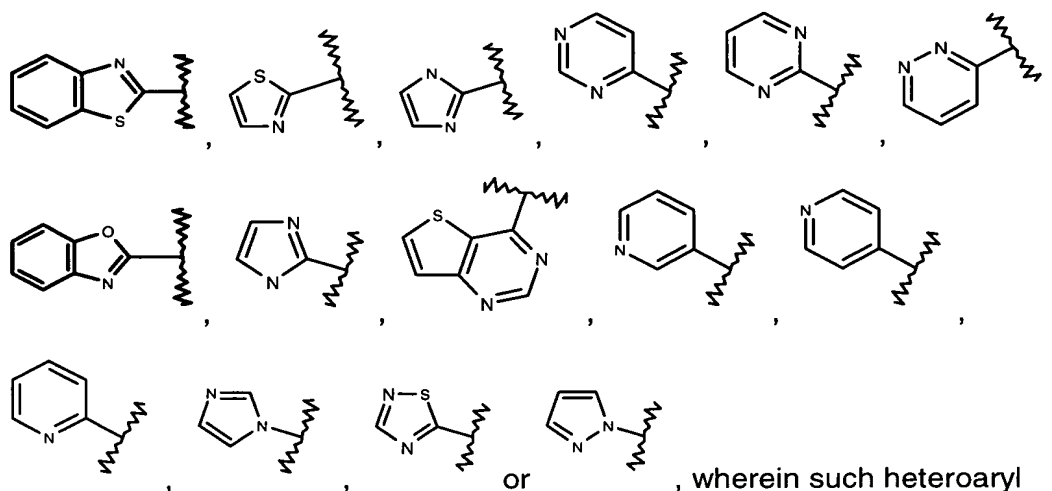
Claim 18 (Cancelled):

Claim 19 (Original): A compound as claimed in claim 16, wherein  $R^1$  is  $C_1-C_6$  alkyl.

Claim 20 (Cancelled):

Claim 21 (Original): A compound as claimed in claim 1, wherein  $Q^3$  is heteroaryl or heteroaryl substituted with at least one independently selected  $R^1$ .

Claim 22 (Original): A compound as claimed in claim 1, wherein  $Q^3$  is selected from the group



, wherein such heteroaryl group is substituted with at least one independently selected  $R^1$ , wherein  $R^1$  is halo,  $C_1$ - $C_6$  alkyl, aryl, heterocyclyl, or  $C_1$ - $C_6$  haloalkyl.

Claims 23-27 (Cancelled):

Claim 28 (Original): A compound as claimed in claim 1, wherein D is  $C_1$ - $C_6$  alkyl or  $C_1$ - $C_6$  alkyl substituted with  $-NR^2R^3$ , wherein  $R^2$  is hydrogen and  $R^3$  is  $-C(O)R^4$  or  $-S(O)_2NR^5R^6$ .

Claim 29 (Original): A compound as claimed in claim 1, wherein D is  $C_1$ - $C_6$  alkyl.

Claims 30-33 (Cancelled):

Claim 34 (Original): A compound as claimed in claim 1, wherein X is  $C(R')(R'')$ , wherein  $R'$  is hydrogen or  $C_1$ - $C_6$  alkyl,  $R''$  is hydrogen and  $C_1$ - $C_6$  alkyl, and p is 0, 1, or 2.

Claim 35 (Original): A compound as claimed in claim 1, wherein X is  $C(H)(R'')$  where  $R''$  is hydrogen and p is 0, 1, or 2.

Claim 36 (Original): A compound as claimed in claim 1, wherein X is  $C(H)(R'')$  where  $R''$  is hydrogen and p is 0 or 1.

Claim 37 (Original): A compound as claimed in claim 1, wherein X is C(H)(R'') where R'' is hydrogen and p is 0.

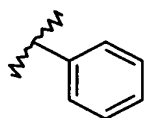
Claim 38 (Original): A compound as claimed in claim 1, wherein X is C(H)(R'') where R'' is -CH<sub>3</sub> and p is 1.

Claim 39 (Original): A compound as claimed in claim 1, wherein X<sup>1</sup> is C(O)OCH<sub>2</sub>, wherein q is 1.

Claim 40 (Original): A compound as claimed in claim 1, wherein X<sup>1</sup> is C(O)OCH<sub>2</sub>, wherein q is 0.

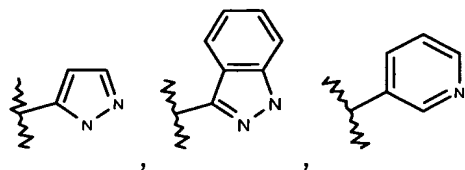
Claim 41 (Original): A compound as claimed in claim 1, wherein X<sup>2</sup> is aryl.

Claim 42 (Original): A compound as claimed in claim 1, wherein X<sup>2</sup> is



Claim 43 (Original): A compound as claimed in claim 1, wherein X<sup>2</sup> is heteroaryl or heterocycl.

Claim 44 (Original): A compound as claimed in claim 1, wherein X<sup>2</sup> is selected from the group



, or substituted derivatives thereof.

Claim 45 (Original): A compound selected from the group consisting of:

1-benzylcyclobutyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 1-benzylcyclopentyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 benzyl(2S)-2-([(3S)-3-([(1-benzylcyclopentyl)oxy]carbonyl)amino)-2-oxoheptanoyl]amino}propanoate;  
 1-benzylcyclohexyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 (1-Benzylcyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino} acetyl) pentyl carbamate;  
 [1-(2-Phenylethyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl] amino} acetyl) pentylcarbamate;  
 [1-(3-Phenylpropyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino} acetyl) pentylcarbamate;  
 (1-Benzylcyclopentyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl) pentyl carbamate;  
 (1-benzylcyclohexyl)methyl (1S)-5-[(4-morpholinylcarbonyl)amino]-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 [1-(4-Fluorobenzyl)cyclobutyl]methyl (1S)-5-[(4-morpholinylcarbonyl)amino]-1-(oxo {[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 [1-(4-Pyridinylmethyl)cyclobutyl]methyl (1S)-5-[(4-morpholinylcarbonyl)amino]-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 [1-(3-pyridinylmethyl)cyclobutyl]methyl (1S)-5-[(4-morpholinylcarbonyl)amino]-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 [1-(2,6-difluorobenzyl)cyclobutyl]methyl (1S)-5-[(methylamino)carbonyl]amino)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
 [1-(4-Fluorobenzyl)cyclobutyl]methyl (1S)-1-[oxo(1H-pyrazol-5-ylamino)acetyl] pentylcarbamate;  
 [1-(4-fluorobenzyl)cyclobutyl]methyl (1S)-1-[[[6-chloro-1H-indazol-3-yl]amino](oxo) acetyl]pentylcarbamate;  
 [1-(4-fluorobenzyl)cyclobutyl]methyl (1S)-5-[[[(dimethylamino)sulfonyl]amino]-1-oxo[(3-pyridinylmethyl)amino]acetyl]pentylcarbamate;

1-(1,3-Benzothiazol-2-yl)cyclopentyl (1S)-1-[oxo(1H-pyrazol-3-ylamino)acetyl] pentylicarbamate;

{1-[(4-phenyl-1,3-thiazol-2-yl)methyl]cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

(1-{[(1-methyl-1H-imidazol-2-yl)sulfanyl]methyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

(1-{[(2-chloro-4-pyrimidinyl)oxy]methyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

[1-({[2-(4-methyl-1-piperazinyl)-4-pyrimidinyl]oxy}methyl)cyclobutyl] methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

[1-({[2-(4-morpholinyl)-4-pyrimidinyl]oxy}methyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

{1-[(2-pyrimidinylsulfanyl)methyl]cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

{1-[(1,3-benzoxazol-2-yl)sulfanyl]methyl]cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

{1-[(1,3-thiazol-2-yloxy)methyl]cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

(1-{[(3-phenyl-1,2,4-thiadiazol-5-yl)oxy]methyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

[1-({[2-(4-phenyl-1-piperazinyl)-4-pyrimidinyl]oxy}methyl)cyclobutyl] methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

(1-{[(1-phenyl-1H-imidazol-2-yl)sulfanyl]methyl}cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

{1-[(thieno[3,2-d]pyrimidin-4-yloxy)methyl]cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

{1-[(2-pyrimidinyl)oxy]methyl]cyclobutyl)methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

[1-({[4-(4-methylphenyl)-1,3-thiazol-2-yl]oxy}methyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

[1-(hydroxymethyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylicarbamate;

[1-({[4-(4-chlorophenyl)-2-pyrimidinyl]sulfanyl)methyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
[1-({[5-(4-chlorophenyl)-1-methyl-1H-imidazol-2-yl]sulfanyl)methyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
{1-[(4-methyl-1,3-thiazol-2-yl)methyl]cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
(1-{2-[(1-methyl-1H-imidazol-2-yl)sulfanyl]ethyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
(1-{3-[(1-methyl-1H-imidazol-2-yl)sulfanyl]propyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate; and  
(1-{3-[(2-chloro-4-pyrimidinyl)oxy]propyl)cyclobutyl]methyl (1S)-1-(oxo{[(1R)-1-phenylethyl]amino}acetyl)pentylcarbamate;  
or a salt, solvate, or physiologically functional derivative thereof.

Claim 46 (Currently Amended): A pharmaceutical composition comprising a therapeutically effective amount of a compound as claimed in claim 1 ~~claims 1 to 44~~, or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

Claim 47 (Currently Amended): A method of treating a disorder in a mammal, said disorder being characterized by enhanced bone turnover which can ultimately lead to fracture, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in claim 1 ~~claims 1 to 44~~ or a salt, solvate or a physiologically functional derivative thereof.

Claim 48 (Currently Amended): A method of treating a disorder in a mammal, said disorder being characterized by bone loss, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in claim 1 ~~claims 1 to 44~~ or a salt, solvate or a physiologically functional derivative thereof.

Claims 49-50 (Cancelled):



Claim 51 (Currently Amended): A method of treating osteoporosis, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in claim 1 ~~claims 1 to 44~~, or a salt, solvate or physiologically functional derivative thereof.

Claim 52 (Currently Amended): A method of treating osteoporosis, comprising: administering to said mammal therapeutically effective amounts of (i) a compound as claimed in claim 1 ~~claims 1 to 44~~, or a salt, solvate or physiologically functional derivative thereof and (ii) at least one bone building agent.